

## DOCUMENT RESUME

ED 386 583

CE 069 839

AUTHOR Howard, Jeff; And Others  
TITLE Learning To Work--Working To Learn (Job Training in a Global Economy).  
SPONS AGENCY Department of Labor, Washington, D.C.; National Youth Employment Coalition, Washington, DC.  
PUB DATE 1 Aug 94  
NOTE 14p.  
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)  
  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Educational Change; \*Educational Needs; \*Educational Practices; \*Education Work Relationship; Employment Programs; \*Global Approach; Inner City; \*Job Training; Models; Objectives; Ou of School Youth; Secondary Education; Urban Education; \*Youth Employment; Youth Programs  
IDENTIFIERS Global Economy

## ABSTRACT

The current education and training system, which was designed with the goal of putting everyone to work and serving the established industrial order, is based on the principle of sorting people according to judgments of their learning capacity and reserving opportunities to learn the skills required to succeed in a global economy for those individuals sorted into the topmost tracks. The "sort and select" principle has given rise to a set of destructive policies and practices that are impeding efforts to prepare the U.S. work force for a global economy and have high hidden costs. A new educational system is needed that will not only put everyone to work but also make everyone productive. Educators must set high standards and move all students toward those standards by taking the following steps: teach explicitly the constructive model of the nature of development and learning capability; build learners' self-confidence by structuring training and working cultures with rigorous standards; and instruct learners in effective effort. Polaroid Corporation's Inner City, Inc., is an example of how programs based on these principles can help unemployed and underemployed populations in inner cities develop the skills required in a global economy. (MN)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

# Learning to Work—Working to Learn

## (Job Training in a Global Economy)

By:  
 Jeff Howard  
 Mia Roberts  
 Verna Ford

Prepared for:  
 The National Youth Employment Coalition  
 and the  
 US Department of Labor

August 1, 1994

The Efficacy Institute, Inc.  
 128 Spring Street  
 Lexington, MA 02173



U.S. DEPARTMENT OF EDUCATION  
 Office of Educational Resources and Information  
 EDUCATIONAL RESOURCES INFORMATION  
 CENTER (ERIC)

☒ This document has been reproduced as  
 received from the person or organization  
 originating it.

☐ Minor changes have been made to  
 improve reproduction quality.

• Points of view or opinions stated in this  
 document do not necessarily represent  
 official OEI position or policy.

"PERMISSION TO REPRODUCE THIS  
 MATERIAL HAS BEEN GRANTED BY

*Jeff Howard*

TO THE EDUCATIONAL RESOURCES  
 INFORMATION CENTER (ERIC)"

# LEARNING TO WORK—WORKING TO LEARN

## (Job Training in a Global Economy)

By Jeff Howard, Mia Roberts & Verna Ford

### Preface

The challenge for America as we move toward the 21st century is to prepare a workforce that can ensure our well-being and quality of life in a dynamic domestic society and a global economy. This will be no easy feat. We are working against a historical tradition of preparing our people for an economic system that required decision making and critical thinking from only a few, and punctuality, reliability, and repetitive work from the many. Our education and training institutions, carefully designed to fulfill this role, afforded most Americans a good living, enabled us to care for those less fortunate, and propelled the nation to global economic leadership. It was a system which served a need and served it well.

The shift from an industrial economy to one driven by sophisticated technology demands that we prepare all Americans, including the least skilled among us, to engage in *highly developed decision making and critical thinking processes*. Of great concern are the vast numbers of young people, particularly young people of color, who lack the basic skills required to be productive citizens even in the fading industrial order.

Compounding our concern is the growing number of displaced adult workers. Evidence mounts of an overall decline in the standard of living for all Americans and a rising share of our tax dollars providing for those in homeless shelters and on welfare rolls. An ever smaller fraction of Americans bear the load for an increasing percentage of Americans who do not, or cannot, presently carry their share. Though significant resources have been deployed to restructure our educational institutions and job training programs toward the task of developing new skills and capabilities in those most disadvantaged of Americans, successes have been few.

Why, after years of urgent attempts at educational reform, do the products of our schools and job training programs look the same—or worse? The answer to this question does not lie solely in deficiencies of teaching and training techniques. More to the point is our nation's mistaken and dangerous belief that our youth and unskilled lack the basic intellectual capacity and character to become self-sufficient.

This lack of belief shows when:

- We assume that job trainees must be guaranteed work as an inducement to engage in their own learning—rather than

assume they have the initiative and the ability to find or create jobs for themselves.

- The drive to place youth in summer jobs comes from a fear of burning cities—rather than confidence that they can become productive citizens and the will to use summer programs as part of a strategy to prepare them.
- We assume that setting high educational standards means setting many (if not most) of our young people up for failure.
- Job training programs train for obsolete jobs, rather than the high skill, high wage jobs that will represent the most important sector of our economy.

In education and training, as in most other human affairs, deeply held beliefs that go unchallenged are a very powerful influence on behavior. Negative beliefs about our people's learning capabilities cause well-intentioned people to undermine self-reliance in the very individuals they are committed to serve. Reform efforts that attempt to replace the bad practices of American education and training without addressing the beliefs that underlie them are regarded as illogical by educators and job training instructors and will not be taken seriously.

This paper delves underneath the current policies and practices of American education and training, challenging the belief system that structures them. It proposes an alternative system of belief which, when embraced, can result in education and training practices that prepare Americans (including today's least skilled) for long-term economic vitality and self-sufficiency. The purpose of education ought to be to produce agile thinkers, creative problem-solvers, and responsible, adept workers. An effective system will integrate learning and working—with education and gainful employment as fundamental ingredients to return American society to a position of world leadership and prosperity.

We will:

- review the origins in the industrial economy of our present education and training system and show how its philosophical framework now impedes our best efforts to prepare the American workforce for a global economy.
- offer a new framework from which to build.

## **I. Our Educational System's Original Goal Was to Put Everyone to Work and Was Designed to Serve the Old Industrial Order.**

Notwithstanding the rhetoric of quality, opportunity, and lately reform, American public education of the 20th century was never designed to widen the stream of highly educated people flowing into adult society and the economy. On the contrary, the primary objective has been culling those judged capable of higher learning from those who were not. "Winnowing" is an apt image for the entire human resource development enterprise in America, from our approach to educating the young in our schools to our management of training and skill development in adult organizations of all kinds.

American educational institutions make judgments about people's abilities and then track them into "ability groups" according to presumptions about their learning capabilities. Jeannie Oakes<sup>1</sup>, in her exhaustive study of the practice of ability grouping, charts the process by which education was brought into line with the requirements of the industrial order in the early part of this century. As we moved from an agrarian to an industrial society, education was made the central agent of the great American sorting process, an efficient mechanism for putting people into the economy's available occupational slots.

Within our current system, young people judged to be intelligent and who achieve high levels of development in K-12 schools typically matriculate into universities where they prepare for highly skilled professional, policy making and administrative occupations. The next level, those considered less academically talented but still strong in basic skills, move into state and community colleges or vocational/technical training institutes to prepare for supervisory and technical support positions. At the bottom, alternative schools and job training programs have become known as "second chance programs" for those considered too "slow" to do well in the academic environment. Here, students are taught only the limited skills required for entry level positions in the manufacturing and service industries with little hope they will ever achieve competitiveness in the economic mainstream.

**Innate Ability - The Logic of the Present System.** The core idea behind this education and training system is the belief that intelligence is an innate, unequally distributed trait, fixed at birth, which sets an upper limit on a person's educability (and therefore employability). In this view, the relationship between intelligence and learning capacity may be represented:

**Innate Ability —→ Development**

---

<sup>1</sup>Oakes, J. Keeping Track: How Schools Structure Inequality. (New Haven: Yale University Press, 1985)

This belief has structured both our current approach to education, and the training of the nation's workforce once formal education has ended. It is an artificial construct sold to justify the sorting required by the industrial order. The man most responsible for the innate ability theory is Louis Terman, whose early 20th century campaign for its adoption as educational orthodoxy dovetailed with the needs of the economic and political system of that time. The innate ability theory's simplicity and its capacity to reliably serve the economic needs of the day contributed to its widespread acceptance. It has become a true paradigm, self-perpetuating beyond its progenitors' hopes.

Belief in innate ability differences has resulted in a national education and training system pervaded by dysfunctional practice and consistently poor results. This innate ability belief system has several premises:

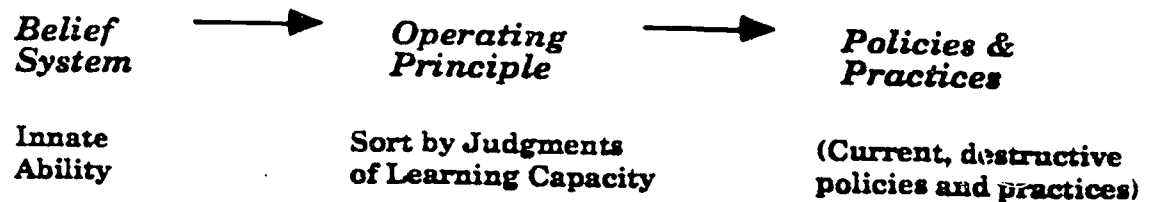
- There is a distribution of intelligence within what is considered the "normal" human population; some individuals are highly intelligent (considered to be very smart), some moderately intelligent (sorta smart), and some are not very bright (kinda dumb).
- Society can specify how much intelligence is needed to learn particular skills and concepts in school to fulfill particular vocational or professional functions in adult life.
- "Experts" can test, measure, and define the limits of intelligence in children and adults.
- Lacking formal test data, even ordinary individuals can observe behavior, and infer the level of innate ability another person possesses.

Acceptance of this belief system generates, as a logical result, the basic operating principle of American education and training: *we sort people by judgments of learning capacity*. Only those sorted into the very top tracks are given the challenges and opportunities to learn that will prepare them to succeed in the 21st century economy. The rest are sorted out of math, science, and other rigorous subjects and into alternative education and "second chance" systems to match them to the service and routine production occupations for which they are judged to be better suited.

The "sort and select" operating principle generates counterproductive policies and practices that rigidly structure education and training in America. These policies and practices, which have so far proved impervious to reform attempts, include tracking, ability grouping, training on soon-to-be-obsolete equipment, and "make work" job placements.



Here is the model of all this:



Our beliefs about learning capacity generate a system that is counterproductive and self-perpetuating, and has a powerful, self-defeating grip on our behavior.

**The Hidden Costs of the Innate Ability Paradigm.** The glow of the economic success achieved in the industrial order made the inherent dysfunction of the innate ability paradigm difficult to perceive. Although in 1992, the US had the highest per capita income (\$14,420) of 23 major industrial countries, (including Japan, Canada, Germany, and Switzerland)<sup>2</sup>, our productivity has been falling relative to successful competitors. Further, there are troubling trends on the domestic front. The gap between the rich and poor widens, the middle class continues to shrink, and the business sector laments the failure of the education and training system to prepare workers for the complexities of even entry level jobs in a technological age. Our search for answers must begin with an examination of the hidden costs of the innate ability paradigm.

The status of the unemployed and marginally employed derives from their having been judged to be "not very bright". They were sorted into the lowest tracks, stigmatized as "ungifted and untalented," and experienced a lethal assault on their self-confidence. Without confidence, the fiber that gives strength and resilience to work and learning, continued effort seems futile, like beating one's head against a wall. With effort impaired, capable people soon appear dumb. They are made to understand that they cannot expect much from education. Accepting this prognosis, they disengage from the learning process, appear lazy, unmotivated, and unable to commit serious effort to the simplest of tasks. They become doomed to live out their lives on the margins, irrelevant and angry, and probably feared and despised.

Those sorted into the moderately intelligent group may have fared better in an industrial economy, but they learn to consider themselves less than "gifted and talented", so they avoid new learning situations, fearing the failures that would demonstrate their relative deficiencies. By playing it "safe", their skills and capabilities have become obsolete as standards of performance rise. In the evolving economy demanding increasing flexibility and lifelong learning, they too see their status drop and incomes fall—often to the ranks of the working poor, sometimes to unemployment.

---

<sup>2</sup>Source: The Department of Commerce Census Bureau, 1992

For those fortunate few judged as highly intelligent, confidence sustains effort and commitment to learning. Less tangible, but keenly felt, are the personal sense of isolation, the unhealthy competition among peers, and a sense of loss of community as their fates diverge sharply from the less educated, often including family members as well as ethnic kin. Even among the winners, the educational ideology of innate ability has its costs.

The economic declines we are experiencing at the close of the 20th century are not just the result of ups and downs in the business cycle. Too few of our people are prepared to advance American economic interests. We are losing vitality and competitiveness because of our failures in education and training. But our problems are not based on the deficiencies of our people. We are dispirited and ineffectual because we don't believe in them.

## II. A New Educational System Must Do Better Than Put Everyone to Work; It Must *Make Everyone Productive*.

The challenge of our generation is to develop an education and training system which prepares every single American to *add value* to the national and global economies. The goal is not just to "put everyone to work" but to "make everyone productive". Robert Reich in The Work of Nations asserts that successful 21st century workers must be able to understand the systems behind a given task, routinely identify and solve problems and combine and manipulate data. These necessary skills and capabilities, particularly for many of our job trainees, may seem so far above their current levels of proficiency as to appear unattainable—tempting us to abandon the effort to prepare them. This is something we must not do.

America needs a system of training and development that can take our people to this level. It must be driven by a fundamentally new logic, a logic based on an unwavering belief that intelligence can be developed and that we possess the capacity to do so. Belief in our people's intelligence will generate a very different operating principle—one which we can use to organize training and education practices that get desired results, debunking the myth of the innate ability paradigm, and generating determination to continue the lifelong acquisition of knowledge and skill.

"Get Smart" with the Efficacy Paradigm: A New Logic for a New System. The drive to learn, to add to one's store of knowledge and skills, is innate. Regardless of race, or economic class, all children born healthy learn to communicate via language, and demonstrate a powerful urge to learn from a very early age. Having demonstrated the mental agility to learn a human language—one of the most complex skills anyone will ever master—they have demonstrated that they have the intellectual capacity to perform complex cognitive tasks early and well. At issue is not their learning capacity, but rather the ways in which our society organizes itself to provide information, stimulation and psychological support, enabling each person to extend over a lifetime that natural quest to develop.



At the core of a new, more effective approach to education and training must be the belief that intelligence can be developed and that virtually all people have the innate capacity to achieve high levels of development in all areas of importance. People are not endowed with the same talents in the same measure, but it is reasonable—and prudent—for us to assume that we are each endowed with *enough* mental capacity to develop the high level transferable skills (including math, writing, planning, communicating, managing, etc.) necessary for gainful long-term productivity in a technological age.

The capacity for development is neither innate, nor fixed, nor limited to any fraction of the population. It is rather a function of **confidence** and **effective effort**—factors subject to human management. This relationship is expressed as<sup>3</sup>:



Within this framework, development is a *process of building capability*. In stark contrast to the innate ability paradigm, where higher order intellectual capabilities are tied to some innate trait beyond our influence, this is an empowering belief system, based on the faith that higher order intellectual capabilities can be deliberately built. We need only provide an educational process that is effectively organized and managed.

Here is the sequence, starting with the new belief system that will result in an effective education and training system:

The idea that people can become more intelligent—that they can "Get Smart"—is the essence of a **radically different belief system** about intelligence and learning capacity, composed of several premises:

- Nearly all people are born with the intellectual capacity to develop to the high levels generally understood as "very smart".
- The capacity for high intelligence is distributed to all normal human beings at birth and remains available throughout life. Every healthy brain can "get smart" and can "get smarter". Researchers at institutions including UCLA, University of Wisconsin and Harvard University are showing that experience physically changes the brain<sup>4</sup>. A highly dynamic organ, even the adult brain actually becomes more "intelligent" when faced with more stimuli, shifting cellular functions and building more connective synapses.

<sup>3</sup>Howard, J. "Getting Smart: The Social Construction of Intelligence". (Lexington: The Efficacy Institute, 1991)

<sup>4</sup>Kotulak, R. "Unlocking the Mind." Chicago Tribune, 11-15 April 1993.

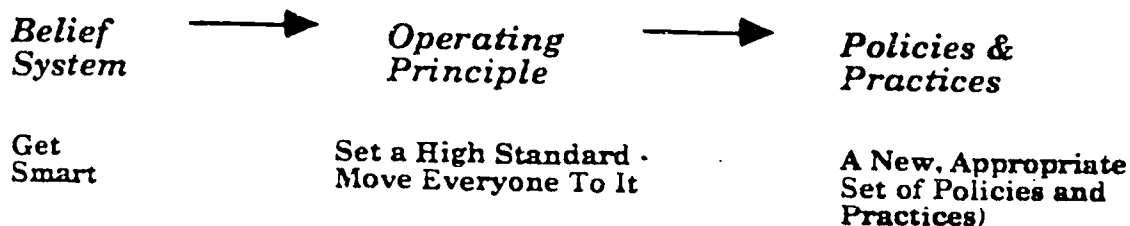
- Development is a function of one's effective effort, which in turn depends on confidence.
- Society can develop or stunt an individual's intelligence by how it structures learning situations.
- Tests and other performance measures are indicators of an individual's present level of capability—not of intellectual limits.

This new belief system sets the table for a **new operating principle**, a new fundamental mission for developing human potential: *Set an appropriate 21st century standard; move everyone to it.* Once we believe that virtually all people can learn at high levels, we are in a position to set standards based on what is required for productive long-term employability. This mission demands that we stop the business of judging which people can learn, and instead use our energy to learn how to teach all people.

Practitioners who believe their students can learn will focus on building a large repertoire of training skills and strategies. The emphasis here is on incremental learning or skills building, for instructors as well as students. The level at which people begin, their present skills and capabilities, will represent a baseline rather than a basis of judgment about their potential.

Getting everyone to a high standard dictates a **radically different set of policies and practices**: consciously designed instructional strategies which, as they prove successful, will develop into institutional rules and methodologies. Strategies will be assessed and selected based on which ones incrementally move people toward the standard and which ones do not.

Here is the model of the new system:



Built from this basic logic, job training practices can be shaped so that instructors and trainees understand their work to be that of *building confidence* in their own and others' capacities to develop, and then shaping effective effort toward achievement. The "motivation problem" so often experienced in education and training venues is not a matter of laziness. It is a function of failures of confidence experienced by people judged deficient in innate ability educational systems. When these same folk experience instructors who believe in them, in training programs *designed* to build their confidence in their own intelligence, we will see people who will commit themselves to learning.

If development is understood to be built through the strategic expenditure of effort, then trainees and their instructors will realize that becoming skilled, competent and smart is within their control. This is a constructive, self-perpetuating belief system, drawing people into more and more successful approaches and progressively greater confidence. This model of development works equally well for those least skilled and those at higher levels. Belief that people can learn, that their intelligence is not fixed, is the basis of building education and training systems that can serve the demands of *our* time.

Practical application of this approach requires a three-step process which integrates belief and confidence building with the traditional focus on transferring specific subject matter such as job skills, life skills, and the like.

Step 1: Explicitly teach the constructive model of the nature of development and learning capability:



Step 2: Build the learners' self-confidence by structuring training and working cultures which set rigorous standards, consistently communicate high expectations and provide systemic support to achieve those standards.

Step 3: Instruct the learner in effective effort—general techniques for development applicable across the range of academic and vocational domains.

**The Polaroid Inner City Example.** This approach works in practice. Inner City, Inc., a subsidiary of the Polaroid Corporation located in Roxbury, Massachusetts, operates an urban job training program designed to serve Boston's unemployed and under-employed population and a small film packaging and color print manufacturing plant. In addition to training and placing workers in manufacturing and service organizations, Inner City hires a percentage as permanent employees. In 1994 Harold Epps, general manager of the facility and his staff designed and implemented a plan for improvement utilizing this approach. Prior to implementing the Efficacy Paradigm, Inner City experienced a 50% attrition rate in its job training program, with most attrition occurring in the first 6-7 weeks. In three months, they have increased trainee retention to 80%.

Epps attributes this early success to two factors: (1) trainees are held to a higher standard of performance and behavior by their counselors and peers; (2) they have come to believe they can, or can learn, to solve problems—at work and at home.

The Inner City staff *and* the program's trainees rewrote the mission statement, changing its focus from *process*—working hard—to *outcomes*—working effectively against explicit classroom goals and the plant's cost and quality standards. Epps trained his staff to set challenging yet realistic incremental learning objectives for themselves and the trainees, building confidence that they could achieve the standards and outlining strategies for making it happen. Staff meetings were devoted to examination of existing policies and practices—evaluating whether they supported progress toward training and business objectives and revising them as needed.

Below is a summary of how Inner City is putting into practice the three-step approach:

- The staff and trainees have reworked the mission statement to emphasize continuous education and vocational advancement.
- Management consistently communicates high expectations to trainees and staff: "We can do this."
- High standards of performance have been maintained, consistent with expectations.
- Work is organized in a step-by-step approach which structures progress to those standards.
- Staff meeting time is routinely set aside for exchange of "best practices" and problem solving.
- Structured support is provided to trainees after placement to ensure longer term success.
- Systemic incentives were developed to encourage trainees to engage in greater and greater risk-taking and build increased skills.

Successful development at one skill or functional area builds confidence to apply effective effort at the next. In this fashion, a job trainee *learns to work*—acquires skills for a specific job placement—and *works to learn*—uses each job assignment as a building block to learn how to work at the next level of complexity.

Polaroid's Inner City represents the first systematic attempt to use the Efficacy approach in a job training venue. The results so far, according to Epps, "show significant improvement in the commitment and quality of work performed by trainees and permanent staff and are very promising for improving long-term productivity in our business operations." He adds, "Our on-going evaluation of this effort will focus on leveraging these early gains so that trainees acquire skills to move beyond entry level jobs and on increasing the plant's competitiveness in the general marketplace."

The cycle of learning to work/working to learn is an important shift in the way we think about development and long-term employability. America needs a human development system—a system which structures a tight link between on-going education (the lifelong acquisition of skills and capabilities) and enduring employability (the capacity to move nimbly among shifting

opportunities), eliminating the need for alternative schooling or "second chance" systems as we know them.

**Transforming Belief Into Action: The Power of an Operating Principle.** The new operating principle, *Set a high standard; move everyone to it*, establishes a consistently high expectation for all trainees and everyone who supports them. Once the target has been set, policy makers and practitioners will consciously restructure their practices and reinforce activities which result in incremental improvement until the standard is achieved.

Professionals in the field must be trained to realize that their jobs are to produce outcomes. Each component of each program can be evaluated in terms of the extent to which it moves trainees closer to the standard. Programs that successfully move trainees to the standard should be funded. Those that do not should be reorganized or defunded. Existing programs reporting high dropout rates, high incidence of off-task activities, and histories of cycling people through short-term, dead-end jobs become candidates for elimination.

There is nothing really new about the "new paradigm." Effective programs have always used such an approach, by whatever name. Much good work has been generated on a small scale, but never nationally embraced. The logic proposed here, if embraced and espoused at the national level, could focus attention on successful practices, making them intelligible and legitimate and generate the impetus to spread their use—because what is new about the new paradigm is that it makes explicit a healthy, adaptive underlying belief system, a belief system that makes constructive practices seem only logical.

The logic proposed here can serve as the foundation of a focused campaign to transform belief and action on a national scale. We must establish a compelling mission—make everyone productive—which captures the hearts and minds of the American public, accompanied by clear operational approaches that generate belief in our capacity to do it. Such a campaign would be aimed at trainees, employers and taxpayers. Millions currently on welfare need to come off; millions now coming out of schools need to increase their level of preparedness for 21st century jobs; millions of dollars being spent on remediation, security and incarceration need to be invested more productively. Millions need an infusion of hope that they can achieve a quality life through long-term productivity and self-sufficiency in the economic mainstream.

This is all very possible, but it cannot be done without first altering the logic on which the present approach to education and training is based. The faulty logic of the current system is based on the prevailing belief in the innate ability paradigm. Using the powers of influence inherent in national authority we can shift to an empowering system of belief. We can become a nation of "gifted and talented" by transforming our citizens into lifelong



learners with a singular operational objective: Learn to Work—Work to Learn.

**It's All About Belief.** In the contention that is likely to accompany change, we must stay focused on broader national interests, and on the implications of this struggle on the well-being and quality of the life of this nation. There will, in fact, be no losers in an effective system built on the presumption that "all people can learn." Far from watering down the excellent education and training we presently offer to a narrow segment of our population, a system that holds itself accountable for teaching everyone will unleash the intelligence of policy makers and practitioners to find new, more effective strategies that will benefit each of us. We are all in the same boat, and we simply cannot afford for a large segment of the American population to remain undeveloped. Our national prosperity and international competitiveness rest on developing the skills of all toward socially constructive productivity. In the world we are creating, it is immoral to deprive any of us of the knowledge and skills each needs to prosper.